



#16
- 12-17-03
N.P.

Patent
Attorney's Docket No. 016660-128

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
Hoi-Sing Kwok et al.) Group Art Unit: 2774
Application No.: 09/071,202) Examiner: J. Lesperance
Filed: May 1, 1998) Confirmation No.: 5254
For: METHOD AND APPARATUS FOR)
DRIVING REFLECTIVE BISTABLE)
CHOLESTERIC DISPLAYS)

DECLARATION UNDER 37 C.F.R. § 1.131

RECEIVED

Assistant Commissioner for Patents
Washington, D.C. 20231

DEC 13 2002

Technology Center 2600

Sir:

1. WE, Hoi-Sing Kwok, Fei-Hong Yu, Qing-Cheong Li, and Wing-Chiu Yip are the inventors of the subject matter described and claimed in the above-captioned U.S. Patent Application (hereafter, the "Kwok et al. application"), which is assigned to the Hong Kong University of Science and Technology located in Clear Water Bay, Kowloon, Hong Kong.

2. In Office Actions dated November 5, 1999, and July 7, 2000, in connection with the Kwok et al. application, the pending claims of the Kwok et al. application were rejected over U.S. Patent No. 5,933,203 (hereinafter, the "Wu et al. patent") and over combinations of U.S. Patents which included the Wu et al. patent as a primary reference. The cover page of the Wu et al. patent is attached hereto as Exhibit A and indicates that the Wu et al. patent was filed in the U.S. Patent and Trademark Office on January 8, 1997, and subsequently issued as a U.S. patent on August 3, 1999.

3. We had a manuscript publish on May 12, 1997, as Yu et al., "A New Driving Scheme for Reflective Bistable Cholesteric LCDs," *SID SYM*, vol. 28, 1997, pp. 659-662. A copy of the published manuscript is attached hereto as Exhibit B.

4. The manuscript was submitted to the Society for Information Display (SID) on December 22, 1996, prior to the January 8, 1997 filing date of the Wu et al. patent, for publication in *SID SYM*, the SID 1997 symposium digest. Attached hereto as Exhibit C is a copy of e-mail correspondence dated September 5, 2002, from Dee Dumont, the Executive Director of the Society for Information Display, to Mr. Graeme Hall, our counsel in the Hong Kong office of Lloyd Wise & Company. In this e-mail correspondence, Mr. Dumont verifies that the manuscript was accepted by the SID on December 22, 1996.

5. The published manuscript (Exhibit B) lists inventors Hoi-Sing Kwok and Fei-Hong Yu as authors and names inventor Wing-Chiu Yip as a participant in work which resulted in the published paper (see Exhibit B, page 662). While inventor Qing-Cheng Li is not acknowledged in the published manuscript (Exhibit B), Qing-Cheng Li collaborated with co-inventors Hoi-Sing Kwok, Fei-Hong Yu and Wing-Chiu Yip in work that resulted in the published manuscript (Exhibit B).

6. The published paper of Yu et al. (Exhibit B) contains the same content as the manuscript submitted to the Society for Information Display on December 22, 1996.

7. The published paper (Exhibit B) represents the subject matter set forth in the Kwok et al. application and encompassed by presently pending independent claim 6. For example, Figures 1-5 of Exhibit B provide the basis for Figures 1-5 of the Kwok et al. application. Further, the text of Exhibit B provides the basis for the written description of the Kwok et al. application. For instance, the section of Exhibit B entitled "Pixel switching characteristics" discloses that several bistable cholesteric display (BCD) test cells were made. Figure 1 of Exhibit B shows resulting reflectance versus voltage characteristics obtained from responses of a BCD test cell to various switched voltages. Exhibit B also discloses a BCD display driving scheme in the section "Details of the New Driving Scheme." This section describes the reflectance of simulated selected and non-selected pixel cells in a display driven with scanning (row) and data (column) pulse trains. For example, in the simulated "select" pixel shown in Figure 3, an initial voltage (refresh pulse) sets the pixel to a reflective planar (P) state, a selection pulse is applied subsequent the initial voltage to switch the pixel to the



BEST AVAILABLE COPY

09-NOV-2002 09:15
09-OCT-2002 14:05
HKUST
HKUST

• 652 ZD53 1457 P.04/04
p.2
• 652 ZD53 1455 P.04/04

Application No. 09/071,382
Attorney's Docket No. 016660-128

smoking/transparent focal comic (ZC) smoke, and the panel is maintained in the PU state for a period of holding (i.e. viewing) time.

We further declare that all statements made above of our own knowledge are true, and that all statements made on the information and belief we believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the above-referenced application or any patent issuing thereon.

Dated: 20/11/2002 By: H. H. K. Kwok
Dated: 8/10/2002 By: J. M. Yau
Dated: 7/11/2002 By: Felix Hung Yu
Dated: 30 Oct 2002 By: Chen-Cheng Li
By: Wing Cheung Ip

RECEIVED
DEC 13 2002

Technology Center 2600

TOTAL P.04

TOTAL P.04